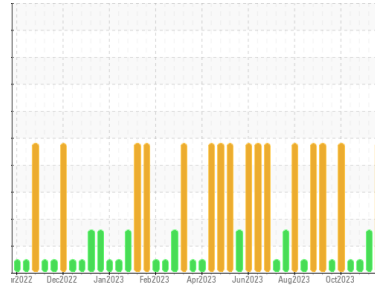




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
SAVM02BE (S/N GZJ00544)
 Component
Biogas Engine
 Fluid
CHEVRON HDAX 6500 LFG GAS ENGINE OIL (141 GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0788882	WC0788880	WC0788927
Sample Date	Client Info		06 Nov 2023	30 Oct 2023	23 Oct 2023
Machine Age	hrs	Client Info	74572	74426	74283
Oil Age	hrs	Client Info	545	307	165
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			SEVERE	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Water	WC Method	>0.1	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>15	1	3	0
Chromium	ppm	ASTM D5185m	>4	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>6	2	2	<1
Lead	ppm	ASTM D5185m	>9	0	<1	0
Copper	ppm	ASTM D5185m	>6	<1	2	2
Tin	ppm	ASTM D5185m	>4	3	2	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		10	9	10
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		17	19	16
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		9	12	9
Calcium	ppm	ASTM D5185m		1880	1830	1731
Phosphorus	ppm	ASTM D5185m		276	285	271
Zinc	ppm	ASTM D5185m		345	353	308
Sulfur	ppm	ASTM D5185m		1715	2158	1488

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>181	256	198	130
Sodium	ppm	ASTM D5185m		0	<1	0
Potassium	ppm	ASTM D5185m	>20	5	7	2

INFRA-RED

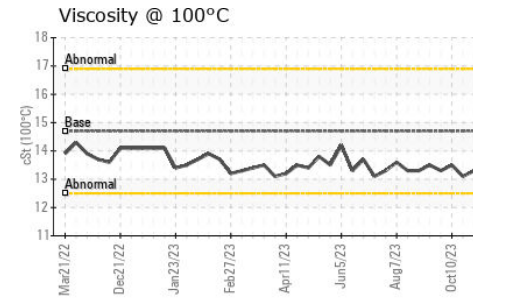
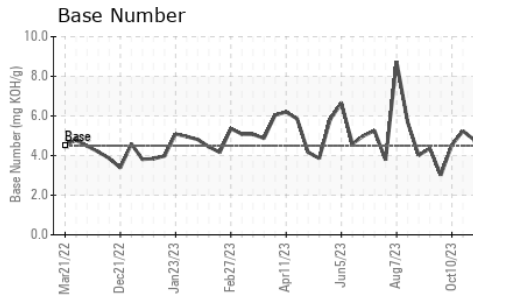
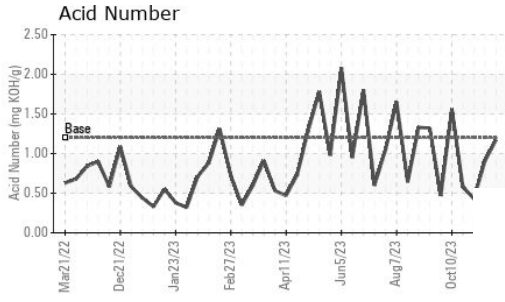
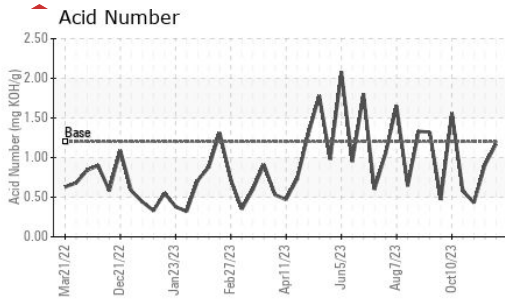
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	7.2	6.6	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	18.4	17.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	12.6	10.9
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	1.17	0.91	0.43
Base Number (BN)	mg KOH/g	ASTM D2896	4.5	4.45	3.37	4.80



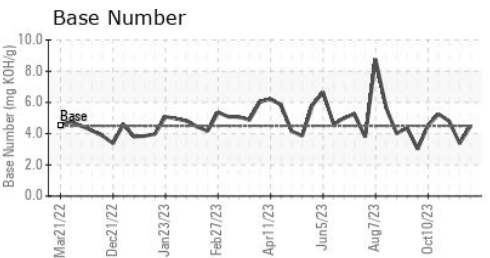
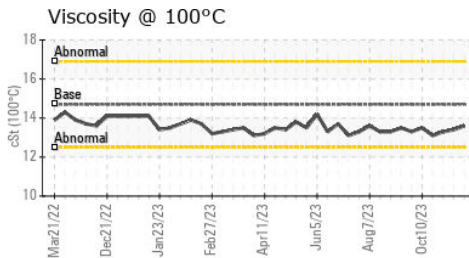
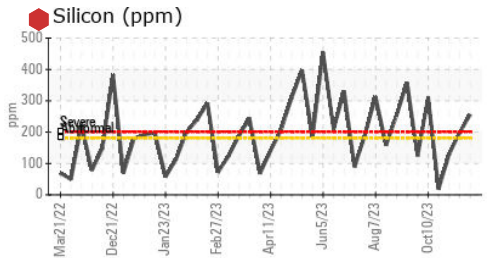
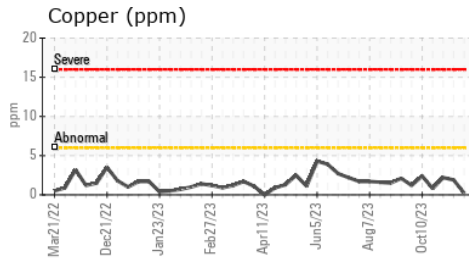
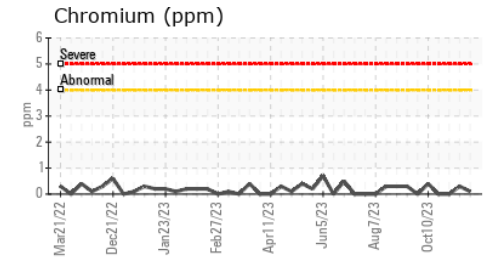
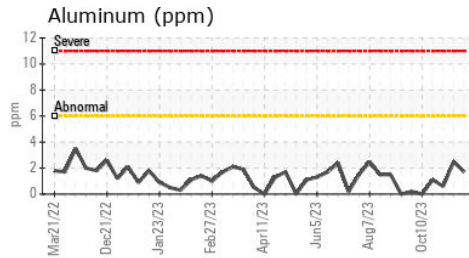
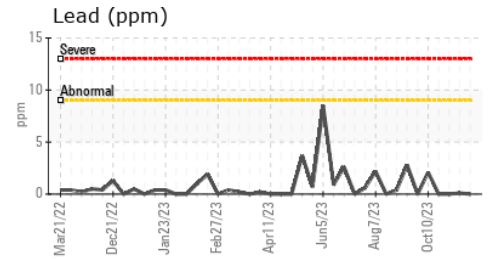
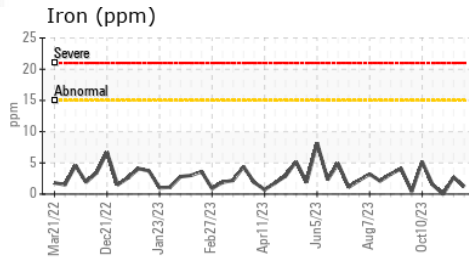
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.7	13.6	13.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0788882 Received : 22 Nov 2023
 Lab Number : 06015282 Diagnosed : 26 Nov 2023
 Unique Number : 10754426 Diagnostician : Don Baldrige
 Test Package : MOB 2

EDL NA Recips-Sand Valley
 SAND VALLEY POWER STATION, 3345 COUNTY ROAD 209
 COLLINSVILLE, AL
 US 35961
 Contact: BRANDON PEYTON
 brandon.peyton@energydi.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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